



BROADCAST FIBER OPTIC SOLUTIONS

USER MANUAL

CAMPLEX FIBERGIG

**2-Channel Bidirectional Broadcast 3G-SDI
Fiber Optic Transport**



CMX-FG500—opticalCON Quad I/O



CMX-FG550—ST Fiber I/O

CMX-FG500/FG550

Complex FiberGig Bidirectional 2-Channel Broadcast 3G-SDI Fiber Optic Transport

The Complex FIBERGIG CMX-FG500/FG550 is a bidirectional 2-channel 3G-SDI over singlemode fiber optic video transport system in a rackmount enclosure with one opticalCON quad connector (model FG500) or four ST connectors (model FG550). The transport system is engineered for long haul video extension up to 12 miles.

The system features looping outputs with each input for local monitoring or recording and dual outputs per receiver. Automatic equalizing and re-clocking ensure a crisp, clean signal over long distances making it ideal for live events, rental and staging, or building a broadcast infrastructure. A single IEC AC power cord powers each unit which reduces the number of cables.

Includes

- Two 1RU cabinets; one TX and one RX unit
- Two standard 6 foot IEC type power cords
- Rack screws for installation in a standard 19" equipment rack

Features

- Single rack unit enclosure for TX and RX unit with front panel connections
- Standard IEC 110/240vac 50/60Hz power inlet on back panel
- 3G-SDI 2 channel bidirectional video transmission; 2 channels-2 ways
- Supports HDTV (1.485Gbps, and 3Gbps, 1080p60), SDTV (143-540Mbps) resolutions
- Singlemode fiber connections
- Automatic cable equalization and re-clocking
- Extends transmission capability up to 12 miles (20km)
- Lightweight, rugged, aluminum cabinet

CMX-FG500/FG550

Specifications

- SMPTE 424/292M/259M standards, DVB-ASI
- Reclocking at 270Mbps, 1.48Gbps, 3Gbps
- Video Connector = 75Ω BNC
- Supports signal type: 270Mbit/s to 3Gbit/s
- 2 SDI inputs and 2 SDI outputs on each TX and RX
- All inputs have an adjacent looping output
- All outputs are dual outputs
- Black anodized aluminum housing
- Rugged Neutrik/Senko connectors



CMX-FG550
2 Ch-2 ways 3G-SDI,
ST Fiber I/O

CMX-FG500
2 Ch-2 ways 3G-SDI,

CMX-FG650
2 Ch 3G-SDI & GIG-E,

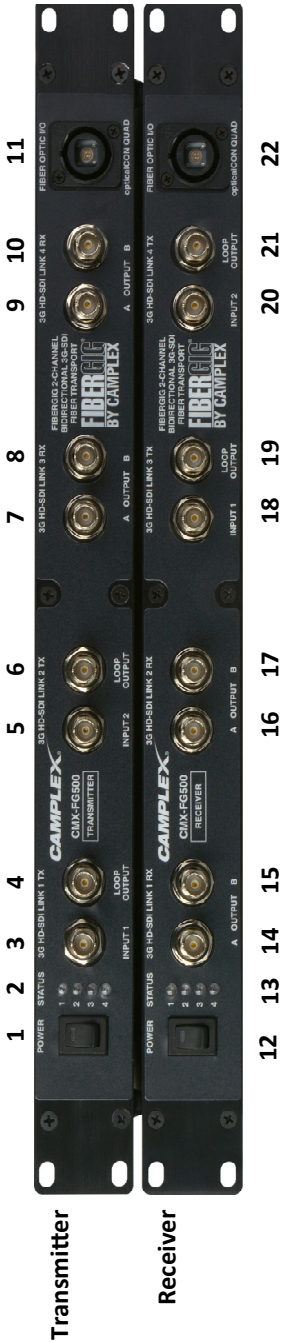
CMX-FG600
2 Ch 3G-SDI & GIG-E,

CMX-FG750

CMX-FG700
2 Ch GIG-E,

Complex FiberGig Series

CMX-FG500 Features



Transmitter

Receiver

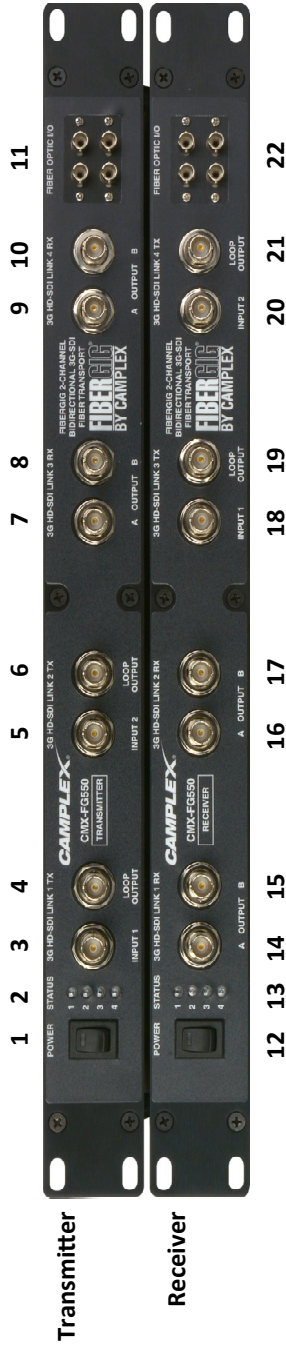
CMX-FG500 Transmitter

- 1 Power Switch
- 2 Status LED Indicators
- 3 Link 1 Input 1
- 4 Link 1 Loop Output
- 5 Link 2 Input 2
- 6 Link 2 Loop Output
- 7 Link 3 Output A
- 8 Link 3 Output B
- 9 Link 4 Output A
- 10 Link 4 Output B
- 11 opticalCON Quad Connector

CMX-FG500 Receiver

- 12 Power Switch
- 13 Status LED Indicators
- 14 Link 1 Output A
- 15 Link 1 Output B
- 16 Link 2 Output A
- 17 Link 2 Output B
- 18 Link 3 Input 1
- 19 Link 3 Loop Output
- 20 Link 4 Input 2
- 21 Link 4 Loop Output
- 22 opticalCON Quad I/O

CMX-FG550 Features



CMX-FG550 Transmitter

- 1 Power Switch
- 2 Status LED Indicators
- 3 Link 1 Input 1
- 4 Link 1 Loop Output
- 5 Link 2 Input 2
- 6 Link 2 Loop Output
- 7 Link 3 Output A
- 8 Link 3 Output B
- 9 Link 4 Output A
- 10 Link 4 Output B
- 11 Four ST Connectors

CMX-FG550 Receiver

- 12 Power Switch
- 13 Status LED Indicators
- 14 Link 1 Output A
- 15 Link 1 Output B
- 16 Link 2 Output A
- 17 Link 2 Output B
- 18 Link 3 Input 1
- 19 Link 3 Loop Output
- 20 Link 4 Input 2
- 21 Link 4 Loop Output
- 22 Four ST I/O

CMX-FG500/FG550 Features

Back Panel

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CMX-FG500/550 Transmitter & Receiver

23 AC Power Input 2A/110-240VAC 50/60Hz

CMX-FG500/550 Set Up Instructions

1. Secure the units in a safe location, where they will not be subject to impact and where there is room around the unit so nothing will interfere with the fiber optic cabling causing it to bend sharply in a tight radius in any way which can severely affect the signal transfer.
2. Carefully connect your source(s) to the transmitter input(s) and the receiver unit output(s) to your receiving device input(s) using the BNC connectors on the transmitter and on the receiver unit.
3. CLEAN* the fiber optical cable contacts that will be used for connecting the Tx and Rx units and attach the fiber cable to the connections and secure, as you would secure a bayonet BNC. While pressing lightly in on the connector, twist it in a clockwise direction about 1/8 to 1/4 of a turn and then release. The connector should stay inserted and have backwards spring pressure holding the bayonet in place.
4. Connect the included power supplies to the transmitter & receiver units, and plug them both into an AC power source.

* CLEAN: All fiber optical cable contacts (the end that is inserted and makes contact to enable light wave transmission through the fiber) require cleaning each time before inserting into a device's outputs or inputs. Failure to clean the contacts can damage the unit's optics over time and also render the cable and the device nonoperational.

Use cleaning kits designed specifically for fiber optics. Other cleaners may add contaminants not seen by the naked eye which could damage cables and/or equipment.



SAFETY PRECAUTIONS



1. To prevent fire or shock hazard, do not expose this equipment to high humidity and/or dust. Do not use in an unprotected outdoor installation nor any area classified as overly damp.
2. The temperature for installation should be kept between 32°F to 140°F (0°C to 60°C). Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.
3. Do not disassemble the unit or place it on an unstable base.
4. Do not drop the unit and avoid heavy impact.
5. This unit should not be permanently installed unless proper ventilation is provided. Any enclosure openings must not be blocked or covered as they protect the unit from overheating.
6. Before cleaning, turn off the power and unplug the unit from all connections. Use a damp cloth. Do not use liquid or aerosol cleaners.
7. Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
8. Enclosure entry is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
9. Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage and other hazards.
10. There are no user-serviceable parts inside the unit. If the unit requires service contact your authorized dealer, or an authorized repair service company.

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